		1 A A A
	Application No.	Applicant(s)
A	09/841,373 Examiner	LOW ET AL. Art Unit
4	Nihir Patel	3743
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS (of herewith (or previously mailed), a Notice of Allowance (PTOL-85) of NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIG of the Office or upon petition by the applicant. See 37 CFR 1.313	OR REMAINS) CLOSED or other appropriate comm GHTS. This application is	in this application. If not included nunication will be mailed in due course. <b>THIS</b>
1. This communication is responsive to May 3 <sup>rd</sup> , 2004.		
2. 🛮 The allowed claim(s) is/are <u>1-5</u> .		
3. $\boxtimes$ The drawings filed on <u>March 12<sup>th</sup>, 2002</u> are accepted by the	Examiner.	
4. Acknowledgment is made of a claim for foreign priority und a) All b) Some* c) None of the:  1. Certified copies of the priority documents have be certified copies of the priority documents have be copies of the certified copies of the priority documents have be copies of the certified copies of the priority documents have be copies of the priority documents have be copies of the certified copies of the priority documents have be certified copies of the priority documents have be certified to provide the mall line below. Failure to timely comply will result in ABANDONMETHIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  5. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which gives be copies of the priority documents have be submit including changes required by the Notice of Draftsperson of the priority documents have below to the priority documents have below the notice of Draftsperson of the priority documents have below to the priority documents have below t	been received. been received in Applicate uments have been received in Application. If this communication to fight of this application. Ited. Note the attached Expression(s) why the oath be submitted. In the submitted on the property of the property of the submitted of the subm	ion No  ed in this national stage application from the  le a reply complying with the requirements  XAMINER'S AMENDMENT or NOTICE OF or declaration is deficient.  ew ( PTO-948) attached  or in the Office action of  the drawings in the front (not the back) of CFR 1.121(d).  TERIAL must be submitted. Note the
<ul> <li>Attachment(s)</li> <li>1. ☑ Notice of References Cited (PTO-892)</li> <li>2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08 Paper No./Mail Date</li></ul>	6. ☐ Interview Paper No 8), 7. ☑ Examiner	Informal Patent Application (PTO-152) Summary (PTO-413), b./Mail Date 's Amendment/Comment 's Statement of Reasons for Allowance Henry Rennett Supervisory Atlant Examiner

Application/Control Number: 09/841,373

Art Unit: 3743

## **DETAILED ACTION**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Anthony W'Karambelas on June 27<sup>th</sup>, 2004.

The application has been amended as follows:

On page 3 line 34 of the specifications, please erase *aft deck 14* from the specifications. Amend claims 1 and 5 as requested below:

Claim 1 (Amended):

A spacecraft radiator system for use on a spacecraft having a body and a plurality of solar arrays, the system comprising:

first and second opposite facing payload radiators;

first and second opposite facing deployable radiators; and one or more coupling or loop heat pipes extending across the body of the spacecraft to connect the opposing payload and deployable radiators, wherein the opposing payload and deployable radiators act in tandem to minimize the amount of solar load.

Claim 5 (Amended)

A space craft heat dissipation method comprising the steps of:

configuring a space craft to have a body, a plurality of solar arrays, first and second opposite facing payload radiators, first and second opposite facing deployable radiators, and one

Application/Control Number: 09/841,373

Art Unit: 3743

or more coupling or loop heat pipes extending across the body of the spacecraft to connect the opposing payload and deployable radiators, wherein the opposing payload and deployable radiators act in tandem to minimize the amount of solar load;

launching the spacecraft into orbit.

## Reason for Allowance

The following is an examiner's statement of reasons for allowance: Claims 1 through 5 of application number 09/841373 are allowable over the prior art of record in that the spacecraft radiator system for use on a spacecraft having a body and a plurality of solar arrays, the system comprises first and second opposite facing payload radiators; first and second opposite facing deployable radiators; and one or more coupling or loop heat pipes extending across the body of the spacecraft to connect the opposing payload and deployable radiators, wherein the opposing payload and deployable radiators act in tandem to minimize the amount of solar load.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nihir Patel whose telephone number is (703) 306-3463. The examiner can normally be reached on 7:30 to 4:30 every other Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on 703-308-0101. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Page 4 Application/Control Number: 09/841,373

Art Unit: 3743

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 28<sup>th</sup>, 2004

Superviscy: Patent Examiner

#oup 3700